

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) A system for providing to an end user, according to selection by the end user, portions of a broadcast data service transmitted together with broadcast digital television data as part of a broadcast signal, the broadcast data service including data portions having digital audio/video data in non-real time, the system comprising:

a processor for extracting all portions of the broadcast data service available from the broadcast signal;

a memory for storing all of the current portions of the broadcast data service; and

a controller responsive to a selection signal provided by the end user to cause the memory to output, independently of and simultaneously with continued receipt of the broadcast digital television data, selected portions of the broadcast data service having digital audio/video data in non-real time; wherein

the processor is also for converting the digital audio/video data of ~~data-portions~~ of the broadcast data service data into real time audio/video data.

2. (Currently Amended) A system according to claim 1 wherein the digital audio/video data of the ~~data-portions~~ of the broadcast data service data is compressed and the processor decompresses the data portions off-line.

3. (Currently Amended) A system according to claim 2 wherein the processor processes the portions of the broadcast data service data ~~portions~~ at times of low usage.
4. (Original) A system according to claim 1 wherein the processor operates directly on the data in the memory.
5. (Original) A system according to claim 1 wherein the processor operates in a batch processing method with data loaded locally from the memory in small chunks.
6. (Currently Amended) A system according to claim 1 wherein digital audio/video data of ~~the data~~ portions of the broadcast data service ~~are~~ is compressed and the processor conducts decompression using a predefined protocol.
7. (Currently Amended) A system according to claim 1 wherein the digital audio/video data of ~~the data~~ portions of the broadcast data service is compressed and the processor conducts decompression using a downloaded protocol.
8. (Original) A system according to claim 1 wherein the processor conducts off line decryption of data using a key.
9. (Original) A system according to claim 1 wherein the memory is a magnetic hard disk drive or a semiconductor memory.

10. (Original) A system according to claim 1 further comprising a digital television receiver for providing the broadcast signal to the processor.

11. (Original) A system according to claim 10 wherein the system is constructed as a single integral unit.

12. (Original) A system according to claim 10 wherein at least the memory is constructed in a unit separate from the digital television receiver and linked by means of a network connection.

13. (Original) A system according to claim 10 wherein the digital television receiver selectively provides digital television data for display and wherein the processor extracts the portions of the broadcast data service irrespective of that display.

14. (Previously Presented) A system according to claim 1 wherein the controller is also for identifying corresponding extracted and stored portions and for replacing data portions stored in the memory with respective portions extracted from the broadcast signal.

15. (Original) A system according to claim 14 wherein, if periodically the broadcast signal includes all of the portions of the broadcast data service, the controller can store all of the received portions in the memory.

16. (Original) A system according to claim 14 wherein the controller can also access an additional data channel so as to obtain and store in the memory all of the portions of the broadcast data service.

17. (Currently Amended) A method of broadcasting a broadcast data service together with broadcast digital television data as part of a broadcast signal, the broadcast data service including audio/video data independent and simultaneously with continued receipt of the broadcast digital television data, the method comprising broadcasting the audio/video data of the broadcast data service as non-real time data, and compressing a block of the audio/video data as a whole.

18. (Canceled)

19. (Previously Presented) A method according to claim 17 wherein the block comprises data requiring off-line decoding.

20. (Original) A method according to claim 17 further comprising, during normal broadcasting, only broadcasting portions of the broadcast data service required to replace previous respective portions which have been changed such that receivers of the broadcast signal may store all of the current portions of the broadcast data service and update the stored portions according to replacement portions received with the broadcast signal.

21. (Original) A method according to claim 20 further comprising additionally broadcasting all of the current portions of the broadcast data service to enable a user to obtain all portions of the broadcast data service soon after initial connection.

22. (Original) A method according to claim 21 wherein all of the current portions of the broadcast data service are broadcast using a separate dedicated channel.

23. (Original) A method according to claim 21 wherein all of the current portions of the broadcast data service are broadcast periodically using an expanded bandwidth at a time of low demand for the broadcast digital television data.

24. (Previously Presented) A system according to claim 12 wherein the network connection is an IEEE 1394 interface.

25. (Previously Presented) A system according to claim 1 wherein the digital audio/video data for conversion into real time audio/video data is transmitted in packets generated according to the MPEG2 standard.

26. (Previously Presented) A system according to claim 25 wherein at least some of the data portions of the broadcast data service having digital audio/video data in non-real time are transmitted according to an alternative protocol to that used for the real time audio/video data of the broadcast digital television data.